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RISK ASSESSMENT AND ENTREPRENEURSHIP DEVELOPMENT IN A DEVELOPING ECONOMY: EVIDENCE FROM AKURE NIGERIA

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Abstract
Effective management of risk and uncertainty in a business enterprise has been identified as one of the challenges faced by an entrepreneur for business development and sustainability. An Entrepreneur who is being regarded as a risk manager has to carry out proper risk analysis that will ensure the success of his or her business through proper identification, assessment, evaluation of risks and uncertainties. Many business enterprises in emerging economies such as Nigeria are prone to higher risks and uncertainties such as environmental risk, financial risk, market risk, production risk and supply risk which have relatively slow down entrepreneurship development. The minimisation of risk through a decrease in financial stake in an enterprise by many business angels in order to lower the rate of risk and uncertainty in an unstable business environment had reduced entrepreneurship development in a developing economy. This paper seeks to identify and analyse some of the risks associated with entrepreneurship development and sustainability in the emerging economy. Data were collected from both primary and secondary sources for the study by employing a descriptive approach and developing a conceptual framework in analysing risk and uncertainty in entrepreneurship development. Hypotheses were developed to test the effect of risk and uncertainty on the development of entrepreneurship with data collection from 105 business enterprises in pharmaceutical industry from States in South West Nigeria and Ordinary Least Square (OLS) Regression method was adopted to estimate the relationship between the variables. Results from the study revealed a positive relationship between the independent (risk) and dependent (Entrepreneurship development) variables. Policy recommendations were made especially on some strategies that can be adopted against risk, such as efficient insurance policy and adequate support of the government and other financial and non-financial institutions to minimise risks encountered by entrepreneur.

K*eywords: Development, Entrepreneur, Risk, Sustainability, Effectiveness*

Background to the Study

Risk taking has been identified as one of the entrepreneurial attributes (Hyrsky, 2000; Georgelli, Joyce and Wood., 2000) apart from work commitment, energy, innovativeness, ambition, achievement, and egoistic features as dimensions of entrepreneurship development (Chaston, 2010). Georgelli et al. (2000) describe "being entrepreneurial" as a willingness to take risks, being innovative and an ambition to a business owner. In a

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similar context, Covin and Slavuy (1988), view entrepreneurial style in terms of the extent to which business managers are inclined to take business-related risks (a risk-taking dimension) favour change and innovation (an innovation dimension), and complete aggressively with other firms (a proactivenss dimension). On the other hand, a non-entrepreneurial style in their terms is characterised as being risk-averse, non-innovative, passive, and reactive (Chaston, 2010). Entrepreneur is being viewed as a calculated risk taker (knight, 1921) and an individual who is prepared to undertake risk and the reward which is the return for bearing uncertainty which is an uninsurable risk. The opportunity for profit arises out of uncertainty surrounding change and if change is perfectly predictable, then no opportunity for profit exists because the entrepreneur is someone who is prepared to undertake risk in an uncertain world and instable business environment that create opportunity and present threats (Deakins and Fred 2008; Ayedun and Awoyemi 2014).

Entrepreneurship holds a veritable position in economic development and its sustainability of any nation (Wale-Awe, 2011). The economic development process depends on adequate supply of entrepreneurs capable to undertake calculated risks (Knight, 1921) effective, and efficient managerial functions (plans, organising, directing, controlling, and leading) Koonts and Weihrich, 2008). Economic development requires sustainable and shared increase in per capita income and gross domestic products (GDP) accompanied by changes in the structural composition of an economy towards higher value added goods and more efficient production methods (Szirmai A., Naude W. and Goedhey, M. 2011). Entrepreneurs can contribute to economic development by facilitating the re-allocation of resource from less to more productive users (Acs and storey, 2004) by cost-discovery, gap-filling and input-completing functions in the economy (Rodrik, 2006) aid by supporting structural changes (Gries and Naude, 2010)

In developing economy such as Nigeria, sustainability can be realised through the opportunity for business to achieve benefits such as higher sales, reduced costs and lower risks from better corporate governance, improved environmental practices, and investments in social and economic development (Szirmai, Naude and Goedhey 2011). Emerging market businesses also face growing risks and opportunities as a result of increasing public apprehension about sustainability related issues. The ability to assess, manage and mitigate risks is the cornerstone skill of successful entrepreneurs and venture investors in their quest to build new industries. Entrepreneurial risk can be defined as the probability of a potential financial or personal loss that may arise from some present or future events in the process of establishing a new venture (Knight, 1921). Usually the probability of that process or event and some assessment of its expected potential loss must be combined into a believable scenario (outcome) which combines the set of risk, regret and reward probabilities into an expected value for that outcome. Understanding the paradigms of any type of risk is complex and involves characteristics of both risk taker (entrepreneur) and the dynamic external environment interacting with the risk taker.

Risk perception is one such characteristic of the risk taker and is one of the psychosocial characteristics that interact within the risk taker's risk analysis and decision making. Perceptions of risk can be altered based on the quality and type of external knowledge that is obtained by the risk taker concerning the potential variability and probabilities of the new venture's future outcome (Chasten, 2010). Risk perceptions by the risk taker may be influenced by his or her innate physical, psychological and social qualities and the external properties of the risk itself. Issues of uncertainty, ambiguity and trust pervade risk perceptions. Risk issues are intrinsically dynamic, changing in profile over time, region and culture. For business, sustainability is about ensuring long-term business success while contributing towards economic and social development, a healthy environment and a stable society (Koonts and Weihrich, 2008) inherent risk and uncertainty.
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Many business failures have been attributed to improper risk analysis by the business owners and their inability to militate against them. In all business activities, there are no guarantees of success as a result of the ability of the entrepreneur to identify and reduce risks and being able to capitalize on the opportunities that will be of great importance towards entrepreneurship development and sustainability. Therefore, this study seeks to assess the impact of risks and uncertainties in entrepreneurial development in Nigeria

Objectives of the Study

The aim of this paper, however, is to access the inherent risk associated with entrepreneurship development and its sustainability in a developing economy such as Nigeria and prefers a possible mitigants towards the identified risk.

i. Examine the risks factors affecting entrepreneurship development in Nigeria
ii. Find the extent in which these factors affect entrepreneurship development in Nigeria
iii. Determine the effect of risk assessment on entrepreneurial development.

Hypothesis Testing

H_1: Risk assessment has no significant effect on Entrepreneurship development.

H_2: Risk assessment has significant effect on Entrepreneurship development

Literature Review

Knight (1921) Identifies concepts of risk and uncertainty as well as the entrepreneur as a risk-taker and manager. It is helpful to see the entrepreneur as a risk manager, as this identifies one of the key concepts to understanding the process of entrepreneurship (Deakins and Fred 2008). In dealing with uncertainty, the entrepreneur has to identify access, evaluate manager and transfer risk (Deakins and Fred 2008). Risk is been regarded as a subset of uncertainty: events which are truly uncertain cannot be predicted with any degree of probability (knight 1921). The findings of this search resulted in a number of definitions of risk and uncertainty. Winch (2002) viewed risk as a state where there is a lack of information, but by looking at the past experience, it is easier to predict the future event where the outcome is known and expected, while uncertainty is a part of the information required in order to take decision. The required information consists of the amount of available information and uncertainty. He further said that the level of uncertainty will decrease further as long as a project is proceeding throughout the lifecycle. According to Cleden (2009), risk is the statement of what may arise from the lack of knowledge or gap in knowledge which we think constitutes a threat to a business. He referred to uncertainty as the intangible measure of what we do not know and it is what is left behind when all the risks have been identified. Smith, Kapp & Yonkers (2006) state that risks occurs where there is some knowledge about the event and here might be not enough information about the occurrence of an event, but we know that it might occur. Risk is a situation in which he possesses some objectives information about what the outcome might be. Risk exposure can be valued either positively or negatively and uncertainty is a situation with an outcome about which a person has no knowledge (Webb, 2003).

Risk assessment is one of the stages in the Risk Management Process (RMP) and can be described as short listing risks with the highest impact on the project, out of all threats mentioned in the identification phase (Cooper, 2005). Although some researchers distinguish between terms risk assessment and risk analysis and describe them as two separate processes, for the purpose of this study, this part of RMP will be consistent with the model provided by Smith (2006) and described as one process. In the analysis of the identified risk, two categories of methods qualitative and quantitative have been developed. The qualitative methods are most applicable when risks can be placed somewhere on a descriptive scale from high to low level. The quantitative methods are

used to determine the probability and impacts of the risks identified and are based on numeric estimations (Winch, 2002). Companies tend to use a qualitative approach since it is more convenient to describe the risks than to quantify them (Lichtenstein, 1996). In addition, there is also one approach called semi-quantitative analysis, which combines numerical values from quantitative analysis and description of risk factors, the qualitative method (Cooper,2005). Within the quantitative and qualitative categories, a number of methods which use different assumptions can be found, and it may be problematic to choose an appropriate risk assessment model for a specific project. The methods should be chosen depending on the type of risk, project scope as well as on the specific method's requirements and criteria.

In a survey conducted by Lichtenstein (1996), many factors were discovered, and the most important ones are listed below.

i. Cost of using the method, both the employment cost and the method itself
ii. Adaptability, the need of adapting to the organization's requirement
iii. Complexity, how limited and simple the method is
iv. Completeness, the method needs to be feasible
v. Usability, the method should be understandable to use
vi. Validity, the results should be valid
vii. Credibility

A successful entrepreneur is someone who can minimize risks either through the limitation of his / her financial stake or by reducing the degree of uncertainty, so that they can be calculated accurately and decision can be made with more reliability (Deakins and Fred 2008; Azari, 2010). Some of the identified associated risks with entrepreneurship development are: environmental risk, financial risk, market risk, production risk and supply risk.

Financial risk arises in an effort by the entrepreneur to expand and grow their business by engaging in various credit options which further exposes them to financial risks (Yusuf and Dausu, 2013). Entrepreneurs find it difficult to fulfil their financial obligations to their various creditors thereby resorting to early liquidation in order to pay their debts with the business asset. Financial risk is an umbrella term for multiple types of risk associated with financing, including financial transactions that include company loans in risk of default. Risk is a term often used to imply downside risk, meaning the uncertainty of a return and the potential for financial loss.

Credit risk, also called default risk, is the risk associated with a borrower going into default (not making payments as promised). Investor losses include loss of principal and interest, decreased cash flow, and increased collection costs. An investor can also assume credit risk through direct or indirect use of leverage. Risk of rapid and extreme changes in value due to: smaller markets; differing accounting, reporting, or auditing standards; nationalization, expropriation or confiscatory taxation; economic conflict; or political or diplomatic changes. Valuation, liquidity, and regulatory issues may also add to foreign investment risk. This is the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit).

Deakins and Fred (2008) maintain that understanding the process of entrepreneurship in the context of the environment, and the degree of risk imposed by that environment gives a greater degree of understanding of what contributes to entrepreneurial success and development, environmental risk can be classified into internal and external environmental risk. Market risk is the risk of losses in positions arising from movements in market prices (Inflation / deflation). This is the most familiar of all risks. Also referred to as volatility, market risk are the day-to-day fluctuations in prices of goods and services and stock's price. Market risk, also called "systematic risk," cannot be eliminated through diversification, though it can be hedged against. The risk that a major natural disaster will cause a decline in the market as a whole is an example of market risk. Other sources of

market risk include recessions, political turmoil, changes in interest rates and terrorist attacks, (Rodrik, 2006).

i. Equity risk, the risk that stock or stock indices
ii. Interest rate risk, the risk those interest rates
iii. Currency risk, the risk that foreign exchange rates
iv. Commodity risk, the risk that commodity prices

Many production process don't have unlimited time, money and resources for evaluating the quality and quantity of the product. Such constraints in terms of time, money and resources represent constraints on the result to be achieved and therefore often reduced evaluation possibilities of the product risks. As such, it is important to achieve a well-considered balance between the investment in money and time on the one hand, and the results to be achieved and the risks covered on the other. The result of the product risk analysis provides the justification for this balance. Based on the insight resulting from the product risk analysis, high risk products can be evaluated more intensively than those representing a lower risk. Be aware that risks and how to cover these risks are directly related to the acceptance criteria.

Meulbrook (2000) view supply risk as adversely affects inward flow of any type of resource to enable operations to take place; also termed as 'input risk'. In addition, Rodrick (2006) define supply risk as "the transpiration of significant and disappointing failures with inbound goods and service. Cleden (2009) has investigated risk within organizational buying behaviour. His literature search uncovered numerous factors that potentially affect managerial risk perceptions of purchasing professionals.

According to Hawley's Entrepreneurship risk theory, profit is the price paid by society for assuming business risk. The theory proposes that an entrepreneur would not take a risk without expecting compensation in excess of actuarial value i.e., a premium on calculable risk. The reason that expected profit must be more than actuarial risk is the assumption that risk gives rise to dis-utilities of various kinds. Therefore, assuming risk gives the entrepreneur a claim to a reward in excess of the actuarial value of the risk. Hawley stated that profit was composed of two parts: one part represents compensation for average loss incidental to the various causes of risk and the other part represents an inducement to suffer the consequences of being exposed to the risk. Profits arose from factor ownership as long as the ownership included risk. If the entrepreneur avoided risk by insuring against it, he ceased to be an entrepreneur and should not receive profits. According to Hawley profit arose out of uninsured risk. The uncertainty ends with sale of the entrepreneur's product. Profit thus is a residue. Hawley's theory is also known as the "residual theory of profit". The foundation of the modern risk theory goes back to the works of Filip Lundberg and Harald Crammer. The Poisson process was proposed by Filip Lundberg in 1903 as a simple process in solving the problem of the first passage time. In 1930 the Lundberg's work was extended for modeling the ruin of an insurance company as a first passage time problem. The basic model is called a Crammer - Lundberg model or classical risk model. Insurance Risk Theory is a synonym of non-life insurance mathematics. The basic process of the general risk model is given by and is called a risk process.

$$X(t) = (t)$$

Here (t) is the total amount of the premiums to the insurance company up to time t. S(t) is the accumulated sum of claims up to time t:

Theoretically the problem of engineering risks investigation seems a very simple: for this it is necessary to determine only the risk distribution. Nevertheless, in practice it is not a simple problem, because of complexity of real risk situations, non-possibility to propose

some clear theoretical bases for risk distribution modelling, and absence of enough statistical data for its estimation. Therefore, in fact the problem is reduced to construction of the probabilistic space for any concrete risk situation. An approach, which reduces the complex problem to the hierarchical sequence of more and simpler ones, was proposed for this. It is realized by means the risk tree construction and analysis.

Methodology
This research employed a survey-based research design with a sample size of 105 of entrepreneurs who have developed multiple opportunities in the pharmaceutical industry in southwest Nigeria. Hypotheses were tested to ascertain the effect of risk assessment on the development of entrepreneurship Descriptive statistics analysis was employed to identify the risk factors and measure the extent of its effect on Entrepreneurship development in south-west Nigeria while Ordinary Least Square linear regression will be used to measure the relationship between the dependent variable (entrepreneurship development) and the independent variable (risk assessment) and ascertain the direction of the effect.

The model for the OLS regression is specified below;

ED = f (RAS)

Where:
ED = Entrepreneurship Development
RAS = Risk Assessment

Data Analysis and Interpretation of Results
From the information gathered for this study, risk factors such as environmental risk, financial risk, market risk, production risk and supply risk have been identified as some of the major factors that have relatively slow down entrepreneurship development. However, respondents were asked to tick the highlighted risk factors to ascertain their knowledge of these factors and that they often encounter these factors as entrepreneurs. Below is the graphical representation of the risk factors from the respondents.

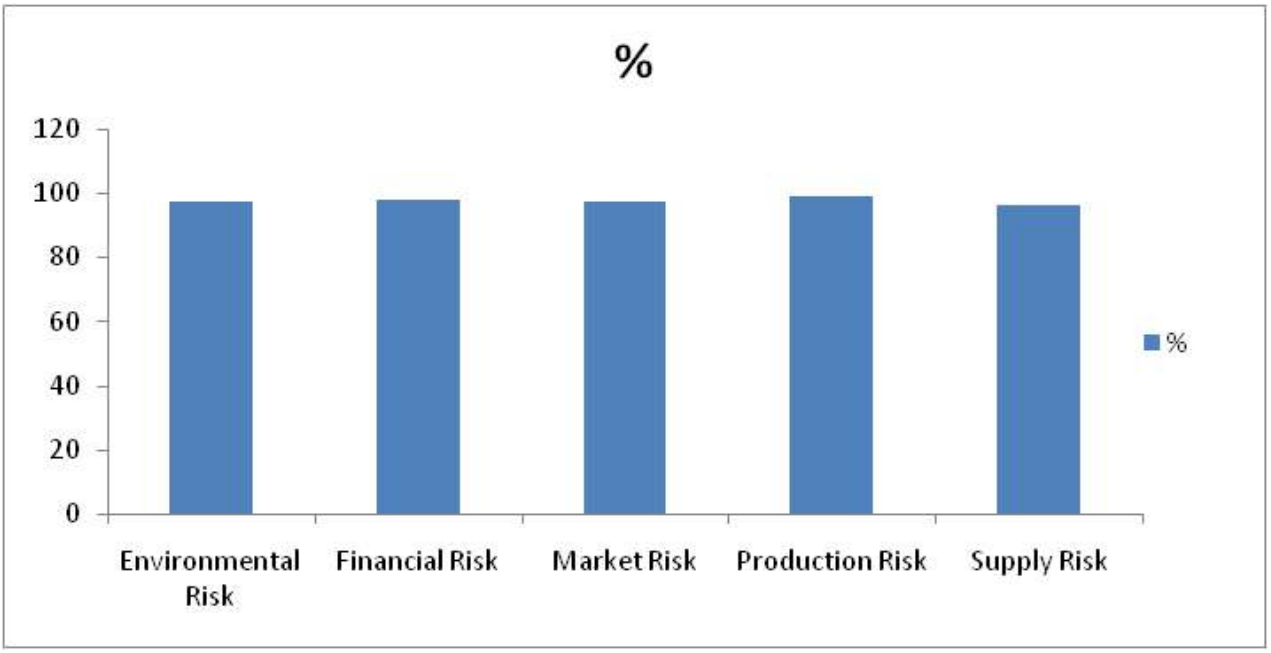

Figure 1: Percentage Level of the Risk Factors

Production risk (99.1%) appears to be the highest risk factor affecting entrepreneurship development and this may be linked to various factor affecting the level of production in small firms such inadequate power supply, high cost of raw material, obsolete machines. On the other hand, financial risk (98.1%) seems to another issue of concern to many entrepreneurs and this may attributed to insufficient capital, lack of access to finance and high interest rates on loans from commercial banks. Environmental risk (97.14%) suggests that there no enabling business environment for business to survive which also have resultant effect on the market.

However, the extent of the impact is measured as respondents were asked to rate the extent of the effect of these risk factors on entrepreneurial development in southwest Nigeria on a descriptive scale of high to low. This is to answer the question of what extent do these factors affect entrepreneurship development in south-west Nigeria?

Table II: Levels of Entrepreneurial Risk

Risk Factors		High(%)	Low(%)
1.	Environmental Risk	79.3	20.7
2.	Financial Risk	94.6	15.4
3.	Market Risk	74	26
4.	Production Risk	76.8	23.2
5.	Supply Risk	35.8	64.2

Source: Field Survey (2014)

From the table above it is seen that environmental risk, Market risk, financial risk and production risk have high effect on entrepreneurship development while supply risk is rated low.

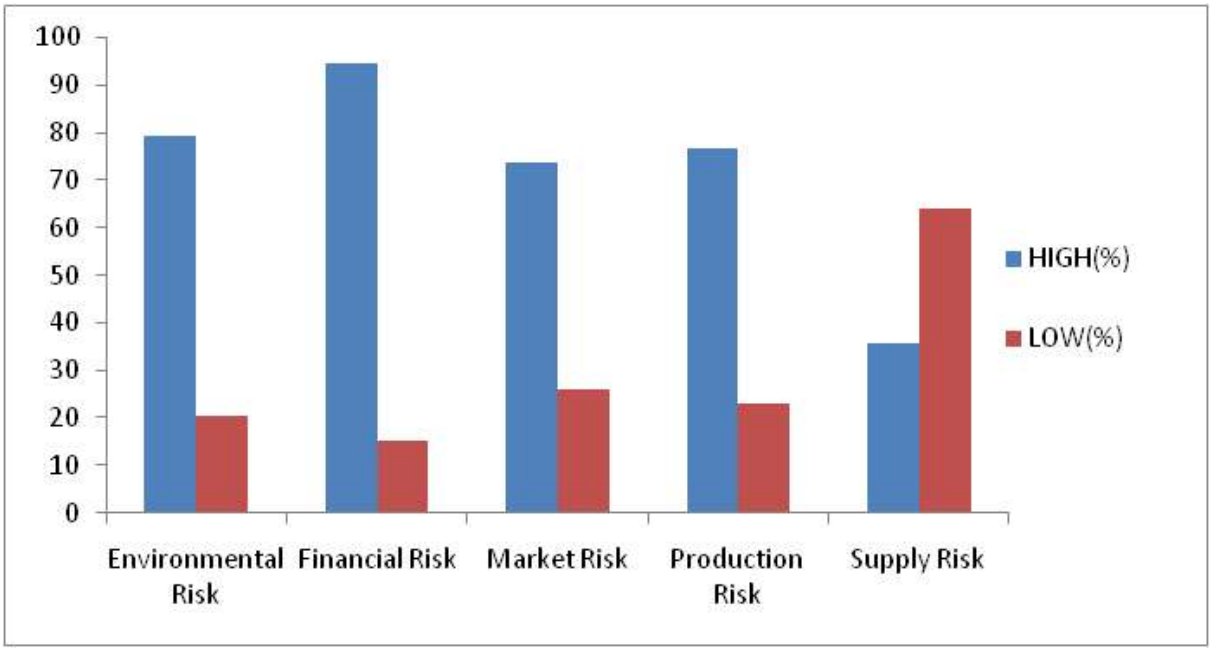

Figure 2: Levels of Entrepreneurial Risk

Variables Entered/ Removed[b]

Model	Variables Entered	Variables Removed	Method
1	RAS[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: ED

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.846[a]	.798	.759	.315

a. Predictors: (Constant), ED

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.761	1	.761	7.650	.013[a]
	Residual	1.789	18	.099		
	Total	2.550	19			

a. Predictors: (Constant), RAS

b. Dependent Variable: ED

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.204E-16	.315		.000	1.000
	RAS	.895	.323	.546	2.766	.013

a. Dependent Variable: ED

From table above showing the relationship between risk assessment & Entrepreneurship develpment it is deduced that 1% in risk assessment will on the average cause 0.895% increase in entrepreneurship development. From table II the R-squared is as high as 0.79 and the adjusted R-squared is 0.76 showing that there exist a high relationship between cost reduction & savings and outsourcing. The F-test which checks the overall significance of the variables is 7.65 which depicts that the variables are statistically significant. Since there is a positive relationship between the dependent and independent variables H_1 is accepted.

Conclusion and Recommendation

Entrepreneurs will want to know what their potential markets are, who are their competitors are and what strategy would be best in the market place. By assessing different risks in the process of production, this includes buying of materials, supplies and assessing risks. The market the entrepreneur engages in uncertainty reducing behaviour

that will maximize his/her probability of success. It is however recommended that government should ensure that there is an enabling environment for business to survive and also some strategies that can be adopted against risk, such as efficient insurance policy and adequate support of the government and other financial and non-financial institutions to minimise risks encountered by entrepreneur.

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